



4-10-06

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Dated: April 7, 2006

Signature:

Laurie Brown
(Laurie Brown)

Docket No.: 57493(47798)
(PATENT)

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
William T. Townsend et al.

Application No.: 10/672,888

Confirmation No.: 9563

Filed: September 26, 2003

Art Unit: 3652

For: INTELLIGENT, SELF-CONTAINED
ROBOTIC HAND

Examiner: D. J. Kramer

INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed more than three months after the U.S. filing date, OR more than three months after the date of entry of the national stage of a PCT application, AND after the mailing date of the first Office Action on the merits, whichever occurs first, but before the mailing date of a Final Office Action or Notice of Allowance (37 CFR 1.97(c)).

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark Office has waived this requirement for all U.S. patent

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applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

Please charge our Deposit Account No. 04-1105 in the amount of \$180.00 covering the fee set forth in 37 CFR 1.17(p). The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 04-1105, under Order No. 57493(47798). A duplicate copy of this paper is enclosed.

Dated: April 7, 2006

Respectfully submitted,

By 

Peter J. Manus

Registration No.: 26,766

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PTO/SB/08a/b (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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| Substitute for form 1449A/B/PTO | | | | Complete if Known | |
| INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i> | | | | Application Number | 10/672,888-Conf. #9563 |
| | | | | Filing Date | September 26, 2003 |
| | | | | First Named Inventor | William T. Townsend |
| | | | | Art Unit | 3652 |
| | | | | Examiner Name | D. J. Kramer |
| | | | | Attorney Docket Number | 57493(47798) |
| Sheet | 1 | of | 2 | | |

| U.S. PATENT DOCUMENTS | | | | | |
|-----------------------|--------------------------|--|--------------------------------|--|---|
| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
| | | Number-Kind Code ² (if known) | | | |
| | AA* | US-4,779,031 | 10-18-1988 | Arends et al. | |
| | AB* | US-5,159,218 | 10-27-1992 | Murry et al. | |
| | AC* | US-5,309,349 | 05-03-1994 | Kwan | |
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| | AE* | US-6,049,474 | 04-11-2000 | Platnic | |
| | AF* | US-4,973,759 | 06-26-1990 | Vold | |
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| | AH* | US-5,155,423 | 10-13-1992 | Karlen et al. | |
| | AI* | US-5,967,580 | 10-19-1999 | Rosheim | |

| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|--------------------------|---|---------------------|--|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | MM-DD-YYYY | | | |
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

| NON PATENT LITERATURE DOCUMENTS | | | | | |
|---------------------------------|--------------------------|---|--|--------------------|----------------|
| Examiner Initials | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | | | T ² |
| | CA | Michael Puttre, "Space-age Robots Come Down To Earth," <i>Mechanical Engineering</i> , pp. 88-89 (January 1995). | | | |
| | CB | Advertisement, Barrett Hand, <i>IEEE Robotics & Automation Magazine</i> , (March 1994). | | | |
| | CC | Barrett Technology, Inc., BH8-250 BarrettHand Information Sheets (2 pages). | | | |
| | CD | Barrett Technology Inc., BarrettHand BH8-200 Electrical Interface Specifications | | | |
| | CE | CPU Board and Motor Board Component Size Specification Sheets for Barrett Hand (1993). | | | |
| | CF | Barrett Technology, Inc, Final Report, Contract NAS9-18642, "Design of an Integrated Arm/Wrist/Hand System for Whole-Arm Manipulation," pp. 1, 23, 24, 28 and 29, (June 1, 1994). | | | |
| | CG | Barrett Technology Inc., "Tiny Motor Provides High Precision," <i>Mechanical Engineering</i> , p. 36, (April 1995). | | | |
| | CH | Adept Technology, Inc., Specification Sheets for Adept FireBlox-1™ Control Module, (4 pages), and Adept FireBlox-1™ Ordering Information (1 page). | | | |
| | CI | Texas Instruments Europe, "There Phase Current Measurements Using a Single Line Resistor on the TMS320F240," Literature Number BPRA077 (May 1998). | | | |
| | CJ | Robotics Research Corporation, "Dexterous Manipulators and Advanced Control Systems," (7 pages); Website: http://www.robotics-research.com/ | | | |
| | CK | Amtec GmbH, "PowerCube: Rotary and Linear Actuators, Robotic Components, Handling Systems." Website: http://www.amtec-robotics.com/ | | | |
| | CL | J.T. Boys, "Novel Current Sensor for PWM AC Drives," <i>IEE Proceedings</i> , Vol. 135, Pt. B, No. | | | |
| Examiner Signature | | | | Date Considered | |

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|---|---|----|---|--------------------------|------------------------|
| Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i> | | | | Complete if Known | |
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| | | | | Art Unit | 3652 |
| | | | | Examiner Name | D. J. Kramer |
| Sheet | 2 | of | 2 | Attorney Docket Number | 57493(47798) |

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|--|----|--|--|
| | | 1, pp. 27-32 (January 1988). | |
| | CM | R.C. Kavanagh, J.M.D. Murphy and M.G. Egan, "Innovative Current Sensing For Brushless DC Drives," IEE PEVD Conf. Publ., pp. 354-357 (1988). | |
| | CN | Intellico, Inc., Specification Sheets for Intellimotor™ Series (1990). | |
| | CO | AllMotion Inc., News Release, "Worlds Smallest Servo Drive from AllMotion Inc.," Website: http://www.allmotion.com/EZSV10pressrelease.htm | |
| | CP | AllMotion Inc., AllMotion Stepper Drive, Stepper Controller, Servo Controller, Server Drive, and Servo Motor Controller and Driver. Website: http://www.allmotion.com | |
| | CQ | Carts Zone, "Speed Controller Info, Alltrax DCX 400 Speed Controller," Website: http://www.cartszone.com/400.html | |
| | CR | Alltrax, Inc., "DCX 300 and 400 amp Separately Exited Motor Controllers," Website: http://www.alltraxinc.com/old/DCX%20300%20&%20400.htm | |
| | CS | Castle Creations, Brochure "Phoenix-25™ Brushless Motor Control" (2003). | |

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

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Application No. (if known): 10/672,888

Attorney Docket No.: 57493(47798)

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Laurie Brown
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Laurie Brown

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IDS (Citation) by Applicant (28 References) (2 pages)